REMARKS

Applicants appreciate the Examiner's thorough examination of the present application as evidenced by the final Office Action of August 23, 2004 (hereinafter "Final Action"). Applicants especially appreciate the indication that Claims 6 - 11, 17 - 22, and 28 - 33 recite patentable subject matter. Rather than place these allowable claims into independent form at this time, Applicants respectfully request that the Examiner take one final look at the independent claims as Applicants continue to maintain that the cited reference fails to disclose or suggest all of the recitations of the independent claims. Therefore, Applicants respectfully submit that all pending claims are in condition for allowance. Favorable reconsideration of all pending claims is respectfully requested for at least the reasons discussed hereafter.

Independent Claims 1, 12, and 23 are Patentable over the Cited Reference

Independent Claims 1, 12, and 23 stand rejected under 35 U.S.C. §103 as being unpatentable over U. S. Patent No. 5,923,557 to Eidson (hereinafter "Eidson").

Independent Claims 1, 12, and 23 are directed to methods, systems, and computer program products for communicating with a controller in real-time. For example, Claim 1 recites:

> storing a command for the controller in a database, wherein the command is selected from the group of commands consisting of a write command that is configured to write a value of a real-time process control variable to the controller and a read command that is configured to read a value of a real-time process control variable from the controller;
>
> detecting the stored command in the database; and
>
> sending the detected command to the controller.

Claims 12 and 23 include similar recitations.

Thus, according to the recitations of Claims 1, 12, and 23, a write or read command for a controller is stored in a database. The stored command is detected and then sent to the controller. In sharp contrast, Eidson describes an interface to process control devices in which controllers (*e.g.*, controllers 60, 61, and 62) communicate with process control devices

(*e.g.*, devices 90, 91, 100, 110, and 112) via mappers (*e.g.*, mappers 70, 71, and 72). (Eidson, col. 3, line 59 - col. 4, line 4). Applicants note that the databases described in Eidson, such as the device-oriented interface database 32 and the device dictionary 38, are used by the mappers 70, 71, and 72 to communicate with the control devices 90, 91, 100, 110, and 112 using an appropriate device oriented protocol 14. In particular, the device-oriented interface database 32 includes information that describes the process control devices in terms of the device-oriented protocol. The device dictionary 38 contains a set of predetermined device-specific information that is tailored in terms of the device-oriented protocol for each process control device supported by a mapper. (Eidson, col. 5, lines 30 - 38). Applicants further note that FIG. 3 of Eidson shows a dictionary server 54 that is connected to the communication network 52. This dictionary server 54 is used by the mappers to build device specific information in their respective device-oriented interface databases. (Eidson, col. 10, lines 21 - 29).

The Office Action states:

> Eidson discloses also the use of "sending the detected command to the controller" as a way of passing the information to the mapping processor which writes it into the database (col. 6, lines 3 - 32)." (Final Action, page 2).

It appears that the Final Action is alleging that the mapping processor 30 described in Eidson corresponds to the controller recited in the pending independent claims. Applicants respectfully submit that if the mapping processor 30 is alleged to correspond to the controller recited in the independent claims, then Eidson does not disclose or suggest <u>detecting</u> the stored command in the database and sending the <u>detected</u> command to the controller. That is, according to the Final Action, information is passed to the mapping processor, which writes the information into a database. In sharp contrast to the recitations of independent Claims 1, 12, and 23, however, the information is not detected in the database and then, once detected, passed to the mapping processor. In fact, according to the Final Action, the mapping processor 30 stores the information in the database so there would be no need to detect the information and then send the information back to the mapping processor 30. (Final Action,

page 2).

Moreover, Applicants respectfully submit that Eidson does not disclose or suggest storing a command for a controller in a database where the command is selected from a write command that is configured to write a value of a real-time process control variable to the controller and a read command that is configured to read a value of a real-time process control variable from the controller as recited in independent Claims 1, 12, and 23. Instead, Eidson explains that "[t]he mapping processor 30 builds a set of configuration information into the device-oriented interface database 32. The configuration information which the mapping processor 30 builds into the device-oriented interface database 32 includes information that described the process control devices 20-22 in terms of the device oriented protocol 14." (Eidson, col. 4, lines 42 - 47; emphasis added). Thus, Eidson describes storing configuration information that describe process control devices in a database rather than a write and/or read command for a real-time process control variable as recited in independent Claims 1, 12, and 23.

In response to the above analysis, the Final Action asserts the following:

> Eidson discloses the use of storing in a database a set of device specific information for each of the process control devices detected by the mapping processor, wherein the process control devices includes specific information for a particular process control device such as the number of variables associated with the process control device and the triggering requirements, wherein in general, each number variable associated with a process control device maps to a channel (col. 4, lines 55-65). (Final Action, page 6).

The foregoing passage from the Final Action along with the reference to Eidson, however, appears to support Applicants' contention that Eidson describes storing configuration information that describe process control devices in a database rather than a write and/or a read command for a real-time process control variable as recited in independent Claims 1, 12, and 23. Applicants cannot find any disclosure or suggestion in Eidson regarding storing a command for a controller in a database where the command is selected from a write command that is configured to write a value of a real-time process control variable to the controller and a read command that is configured to read a value of a real-time process

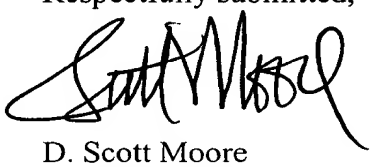
control variable from the controller.

For at least the foregoing reasons, Applicants respectfully submit that independent Claims 1, 12, and 23 are patentable over the cited reference and that dependent Claims 2 - 11, 13 - 22, and 24 - 33 are patentable at least by virtue of their depending from an allowable claim.

CONCLUSION

In light of the above remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,

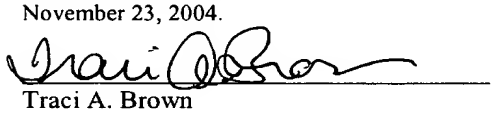


D. Scott Moore
Registration No. 42,011

USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: 919/854-1400
Facsimile: 919/854-1401

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 23, 2004.



Traci A. Brown